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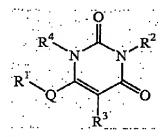
AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1 (currently amended).

A compound of Formula I



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or a pharmaceutically acceptable salt thereof,

wherein:

R¹ is independently selected from:

Cs-or-C6-cycloalkyl (C1-C8-alkylenyl)m;

Substituted C5 or C6 cycloalkyl-(C1 C8 alkylenyl)m;

C₈ C₁₀ bicycloalkyl (C₁ C₈ alkylenyl)_m;

Substituted C8-C10 bicycloalkyl-(C1-C8 alkylenyl)m;

5 or 6 membered heterocycloalkyl-(C1-C8-alkylenyl)m;

Substituted 5 or 6 membered heterocycloalkyl (C_i-C₈ alkylenyl)_m;

8- to 10-membered heterobicycloalkyl-(C₁-C₈-alkylenyl)_m;

Substituted 8-to 10-membered heterobicycloalkyl-(C₁-C₈-alkylenyl)_m;

Phenyl-(C1-C8-alkylenyl)m;

Substituted phenyl (C1-C8 alkylenyl)m;

Naphthyl-(C1-C2-alkylenyl)m;

Substituted naphthyl (C1 C8 alkylenyl)m;

5 or 6 membered heteroaryl (C₁-C₈-alkylenyl)_m

Substituted 5 or 6 membered heteroaryl (C₁ C₈ alkylenyl)_m;

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8-to 10 membered heterobiaryl-(C1-C8 alkylenyl)m; Substituted 8-to-10 membered heterobiaryl-(C₁-C₈-alkylenyl)_m; 5 or 6-membered heterocycloalkyl-phonylonyl (C₁-C₈-alkylonyl)_m; Substituted 5 or 6-membered heterocycloalkyl phenylenyl-(C1-C8 alkylenyl),,;

Biphenyl (C₁-C₂-alkylenyl)_m;

Substituted biphenyl (C₁ C₈ alkylenyl)_m;

5 or 6 membered-heteroaryl-phenylenyl (C₁-C₈ alkylenyl)_m;

Substituted 5 -or 6 membered-heteroaryl-phenylonyl-(C1-C2 alkylenyl)m;

5 or 6 membered heteroaryl (5 or 6 membered heteroarylenyl) (C₁ C₈ alkylenyl)m;

Substituted 5 or 6-membered heteroaryl (5 or 6 membered heteroarylenyl)-(C1-C8-alkylenyl)m;

Phenyl L (5 or 6-membered heteroarylenyl) (C₁ C₈ alkylenyl)_m; Substituted phenyl L (5 or 6 membered heteroarylenyl)-(C₄-C₈ alkylenyl)m;

8 to 10 membered heterobiaryl-phenylenyl (C₁-C₈-alkylenyl)_m; Substituted 8- to 10-membered heterobiaryl phenylenyl (C1-C8 alkylenyl)m;

Phenyl (5 or 6 membered-heteroarylenyl) (C₁ - C₂ -alkylonyl) :: Substituted-phenyl (5 or 6 membered heteroarylenyl) (C1-C8 alkylenyl)m; Naphthyl (5 or 6 membered heteroarylenyl) (C1 C2 alkylenyl) m; Substituted naphthyl-(5-or-6-membered-heteroarylenyl) (C1-C8

alkylenyl)m;

Phenyl (8 to 10 membered heterobiarylenyl) (C1 C2 alkylenyl)_m; and Substituted phenyl (8-to 10 membered-heterobiarylenyl) (C₁-C₈ alkylenyl)_m;

R²-is independently-selected-from:

H:

C1-Cc-alkvl:

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Phenyl (C₁-C₈-alkylonyl)_m;

Substituted-phenyl (C1-C8-alkylenyl)m;

Naphthyl (C1 C8 alkylonyl) m?

Substituted naphthyl-(C1-C8-alkylenyl)m;

5 or 6 membered heteroaryl-(C₁-C₈ alkylenyl)_m;

Substituted 5 or 6 membered heteroaryl (C1-C2-alkylenyl)m;

8 to 10 membered heterobiaryl (C₁ C₈ alkylenyl)_m;

Substituted 8 to 10 membered heterobiaryl-(C1 C2 alkylenyl)m;

Phonyl O (C₁ C₈ alkylonyl);

Substituted-phenyl-O-(C1-C8 alkylenyl);

Phenyl S (C₁-C₈-alkylenyl);

Substituted phenyl-S (C₁-C₈ alkylonyl);

Phonyl-S(O) (C₄-C₈ alkylonyl);

Substituted phenyl S(O) (C₁ C₈-alkylenyl);

Phenyl S(O)2-(C1-C8 alkylenyl); and

Substituted phenyl S(O)2 (C1 C8 alkylenyl);

R¹ is independently selected from:

Phenyl- $(C_1-C_8 \text{ alkylenyl})$;

Substituted phenyl-(C1-C8 alkylenyl);

5- or 6-membered heteroaryl-(C1-C8 alkylenyl);

Substituted 5- or 6-membered heteroaryl-(C₁-C₈ alkylenyl);

8- to 10-membered heterobiaryl-(C1-C8 alkylenyl); and

Substituted 8- to 10-membered heterobiaryl-(C1-C8 alkylenyl); and

R² is independently selected from:

Phenyl-(C₁-C₈ alkylenyl)_m;

Substituted phenyl-(C₁-C₈ alkylenyl)_m;

5- or 6-membered heteroaryl-(C1-C8 alkylenyl)m:

Substituted 5- or 6-membered heteroaryl-(C₁-C₈ alkylenyl)_m;

8- to 10-membered heterobiaryl-(C₁-C₈ alkylenyl)_m; and

Substituted 8- to 10-membered heterobiaryl-(C1-C8 alkylenyl)m;

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Each substituted R¹ and R² group contains from 1 to 4 substituents, each independently on a carbon or nitrogen atom, independently selected from:

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C_1-C_6 alkyl;
CN;
CF<sub>3</sub>;
HO;
(C_1-C_6 \text{ alkyl})-O;
(C_1-C_6 \text{ alkyl})-S;
(C_1-C_6 \text{ alkyl})-S(O);
(C_1-C_6 \text{ alkyl})-S(O)_2;
O_2N;
H_2N;
(C_1-C_6 \text{ alkyl})-N(H);
(C_1-C_6 \text{ alkyl})_2-N;
(C_1-C_6 \text{ alkyl})-C(O)O-(C_1-C_8 \text{ alkylenyl})_m;
(C<sub>1</sub>-C<sub>6</sub> alkyl)-C(O)O-(1- to 8-membered heteroalkylenyl)<sub>m</sub>;
(C_1-C_6 \text{ alkyl})-C(O)N(H)-(C_1-C_8 \text{ alkylenyl})_m;
(C<sub>1</sub>-C<sub>6</sub> alkyl)-C(O)N(H)-(1- to 8-membered heteroalkylenyl)<sub>m</sub>;
H_2NS(O)_2-(C_1-C_8 \text{ alkylenyl});
(C_1-C_6 \text{ alkyl})-N(H)S(O)_2-(C_1-C_8 \text{ alkylenyl})_m;
(C_1-C_6 \text{ alkyl})_2-NS(O)_2-(C_1-C_8 \text{ alkylenyl})_m;
3- to 6-membered heterocycloalkyl-(G)<sub>m</sub>;
Substituted 3- to 6-membered heterocycloalkyl-(G)<sub>m</sub>;
5- or 6-membered heteroaryl-(G)<sub>m</sub>;
Substituted 5- or 6-membered heteroaryl-(G)m;
(C_1-C_6 \text{ alkyl})-S(O)_2-N(H)-C(O)-(C_1-C_8 \text{ alkylenyl})_m; and
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wherein each substituent on a carbon atom may further be independently selected from:

Halo; and

 $(C_1-C_6 \text{ alkyl})-C(O)-N(H)-S(O)_2-(C_1-C_8 \text{ alkylenyl})_m$;

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HO₂C;

wherein 2 substituents may be taken together with a carbon atom to which they are both bonded to form the group C=O;

wherein two adjacent, substantially sp² carbon atoms may be taken together with a diradical substituent to form a cyclic diradical selected from:

R is H or C₁-C₆ alkyl;

G is CH2; O, S, S(O); or S(O)2;

Each m is independently selected from an integer of 0 or 1;

R³ is independently selected from the groups:

H:

CH₃;

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          CH<sub>3</sub>O;
          CH=CH<sub>2</sub>;
          HO:
          CF<sub>3</sub>;
          CN:
         HC(O);
          CH_3C(O);
         HC(NOH);
         H_2N;
         (CH_3)-N(H);
         (CH_3)_2-N;
         H_2NC(O);
         (CH_3)-N(H)C(O);
         (CH_3)_2-NC(O);
         Halo; and
         CO<sub>2</sub>H:
Q is O: independently selected from O, S, S(O), S(O)<sub>2</sub>, and N(<math>R^{5});
L is independently selected from CH<sub>2</sub>, C(O), O, S, S(O), S(O)<sub>2</sub>, and N(R<sup>6</sup>);
R<sup>4</sup>, R<sup>5</sup>, and R<sup>6</sup> are independently H or C<sub>1</sub>-C<sub>6</sub> alkyl;
wherein each C<sub>8</sub>-C<sub>10</sub> bicycloalkyl is a bicyclic carbocyclic ring that contains 8-, 9-
, or 10-member carbon atoms which are 5,5-fused, 6,5-fused, or 6,6-fused bicyclic
rings, respectively, and wherein the ring is saturated or optionally contains one
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wherein each 8- to 10-membered heterobicycloalkyl is a bicyclic ring that contains carbon atoms and from 1 to 4 heteroatoms independently selected from 2 O, 1 S, 1 S(O), 1 S(O)₂, 1 N, 4 N(H), and 4 N(C₁-C₆ alkyl), and wherein when two O atoms or one O atom and one S atom are present, the two O atoms or one O atom and one S atom are not bonded to each other, and wherein the ring is saturated or optionally contains one carbon-carbon or carbon-nitrogen double

carbon-carbon double bond:

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bond, and wherein the heterobicycloalkyl is a 5,5-fused, 6,5-fused, or 6,6-fused bicyclic ring, respectively,

wherein each heterocycloalkyl is a ring that contains carbon atoms and from 1 to 4 heteroatoms independently selected from 2 O, 1 S, 1 S(O), 1 S(O)₂, 1 N, 4 N(H), and 4 N(C₁-C₆ alkyl), and wherein when two O atoms or one O atom and one S atom are present, the two O atoms or one O atom and one S atom are not bonded to each other, and wherein the ring is saturated or optionally contains one carbon-carbon or carbon-nitrogen double bond;

wherein each 5-membered heteroaryl contains carbon atoms and from 1 to 4 heteroatoms independently selected from 1 O, 1 S, 1 N(H), 1 N(C₁-C₆ alkyl), and 4 N, and each 6-membered heteroaryl contains carbon atoms and 1 or 2 heteroatoms independently selected from N, N(H), and N(C₁-C₆ alkyl), and 5- and 6-membered heteroaryl are monocyclic rings;

wherein each heterobiaryl contains carbon atoms and from 1 to 4 heteroatoms independently selected from 1 O, 1 S, 1 N(H), 1 N(C₁-C₆ alkyl), and 4 N, and where the 8-, 9-, and 10-membered heterobiaryl are 5,5-fused, 6,5-fused, and 6,6-fused bicyclic rings, respectively, and wherein at least 1 of the 2 fused rings of a bicyclic ring is aromatic, and wherein when the O and S atoms both are present, the O and S atoms are not bonded to each other;

wherein with any (C₁-C₆ alkyl)₂-N group, the C₁-C₆ alkyl groups may be optionally taken together with the nitrogen atom to which they are attached to form a 5- or 6-membered heterocycloalkyl; and wherein each group and each substituent recited above is independently selected.

2 to 6 (canceled).

7 (currently amended). The compound according to Claim 1, A compound selected from:

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- 3-Benzyl-6-{2-[3-(2,4-dichloro-phenyl)-isoxazol-5-yl]-2-oxo-ethylsulfanyl}-5-methyl-1H-pyrimidine-2,4-dione;
- 3-Benzyl-6-[5-(4-chloro-phenyl)-isoxazol-3-ylmethylsulfanyl]-5-methyl-1H-pyrimidine-2,4-dione;
- 3-Benzyl-6-[3-(4-methoxy-phenyl)-isoxazol-5-ylmethylsulfanyl]-5-methyl-1H-pyrimidine-2,4-dione;
- 3-Benzyl-6-[3-(2,6-dichloro-phenyl)-isoxazol-5-ylmethylsulfanyl]-5-methyl-1H-pyrimidine-2,4-dione;
- 3-Benzyl-6-[5-(2-chloro-phenyl)-isoxazol-3-ylmethylsulfanyl]-5-methyl-1H-pyrimidine-2,4-dione;
- 3-Benzyl-6-[2-(4-chloro-phenyl)-thiazol-4-ylmethylsulfanyl]-5-methyl-1H-pyrimidine-2,4-dione;
- 3-Benzyl-6-[5-(4-methoxy-phenyl)-[1,2,4]oxadiazol-3-ylmethylsulfanyl]-5-methyl-1H-pyrimidine-2,4-dione;
- 3-Benzyl-6-[3-(4-chloro-phenyl)-[1,2,4]oxadiazol-5-ylmethylsulfanyl]-5-methyl-1H-pyrimidine-2,4-dione;
- 3-Benzyl-6-[3-(4-chloro-phenyl)-isoxazol-5-ylmethylsulfanyl]-5-methyl-1H-pyrimidine-2,4-dione;
- 6-(4-Amino-5-phenyl-4H-[1,2,4]triazol-3-ylsulfanyl)-3-benzyl-5-methyl-1H-pyrimidine-2,4-dione;
 - or a pharmaceutically acceptable salt thereof.

8 (currently amended). The compound-according to Claim 1, A compound selected from:

- 3-Benzyl-5-methyl-6-[5-(2-methylsulfanyl-pyridin-3-yl)-[1,2,4]oxadiazol-3-ylmethylsulfanyl]-IH-pyrimidine-2,4-dione;
- 3-Benzyl-5-methyl-6-(3-phenyl-isoxazol-5-ylmethylsulfanyl)-1H-pyrimidine-2,4-dione;
- 3-Benzyl-5-methyl-6-(5-phenyl-isoxazol-3-ylmethylsulfanyl)-1H-pyrimidine-2,4-dione;

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- 3-Benzyl-5-methyl-6-(5-phenyl-[1,2,4]oxadiazol-3-ylmethylsulfanyl)-1H-pyrimidine-2,4-dione;
- 3-Benzyl-5-methyl-6-(2-phenyl-thiazol-4-ylmethylsulfanyl)-1H-pyrimidine-2,4-dione;
- 3-Benzyl-5-methyl-6-[3-(4-nitro-benzyl)-[1,2,4]oxadiazol-5-ylmethylsulfanyl]-1H-pyrimidine-2,4-dione;
- 3-Benzyl-6-[5-(4-chloro-phenylamino)-2H-[1,2,4]triazol-3-ylsulfanyl]-5-methyl-1H-pyrimidine-2,4-dione;
- 6-(Benzothiazol-2-ylsulfanyl)-3-benzyl-5-methyl-1H-pyrimidine-2,4-dione; and
- 3-Benzyl-6-(6-methoxy-benzothiazol-2-ylamino)-5-methyl-1H-pyrimidine-2,4-dione;
 - or a pharmaceutically acceptable salt thereof.
- 9 (currently amended). The compound according to Claim 1; A compound selected from:
- 3-Benzyl-6-[3-(2,6-dichloro-phenyl)-isoxazol-5-ylmethylsulfanyl]-1,5- dimethyl-1H-pyrimidine-2,4-dione;
- 3-Benzyl-1,5-dimethyl-6-[5-(3-methyl-4-nitro-phenyl)-[1,3,4]oxadiazol-2-ylmethylsulfanyl]-1H-pyrimidine-2,4-dione;
- 3-Benzyl-1,5-dimethyl-6-[5-naphthalen-2-yl-[1,3,4]oxadiazol-2-ylmethylsulfanyl]-1H-pyrimidine-2,4-dione;
- 3-Benzyl-1,5-dimethyl-6-(5-phenyl-isoxazol-3-ylmethylsulfanyl)-1H-pyrimidine-2,4-dione; and
- 3-Benzyl-1,5-dimethyl-6-[3-(4-nitro-benzyl)-[1,2,4]oxadiazol-5-ylmethylsulfanyl]-1H-pyrimidine-2,4-dione;
 - or a pharmaceutically acceptable salt thereof.

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10 (original). A pharmaceutical composition, comprising a compound according to Claim 1, or a pharmaceutically acceptable salt thereof, admixed with a pharmaceutically acceptable carrier, excipient, or diluent.

11 (currently amended). The pharmaceutical composition according to Claim 10, A pharmaceutical composition, comprising a compound according to any one of Claims 7 to 9, or a pharmaceutically acceptable salt thereof, admixed with a pharmaceutically acceptable carrier, excipient, or diluent.

12 (original). A method for treating osteoarthritis or rheumatoid arthritis, comprising administering to a patient suffering from osteoarthritis or rheumatoid arthritis a nontoxic effective amount of a compound according to Claim 1, or a pharmaceutically acceptable salt thereof.

13 (currently amended). The method according to Claim 12, wherein the compound administered is A method for treating osteoarthritis or rheumatoid arthritis, comprising administering to a patient suffering from osteoarthritis or rheumatoid arthritis a nontoxic effective amount of a compound according to any one of Claims 7 to 9, or a pharmaceutically acceptable salt thereof.